IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF TEXAS
MARSHALL DIVISION

LOCATION SERVICES IP, LLC,	§	
	§	
Plaintiff,	§	
	§	Civil Action No. 2:17-cv-00218
V.	§	
	§	
BPS DIRECT, L.L.C. D/B/A BASS PRO SHOPS D/B/A BASS PRO, INC.,	§	JURY TRIAL DEMANDED
	§	
	§	
Defendant.	§	

COMPLAINT FOR PATENT INFRINGEMENT

This is an action for patent infringement in which Plaintiff, Location Services IP, LLC ("LSIP"), by and through their undersigned counsel, submit this Original Complaint against the above-named Defendant, as follows:

NATURE OF THE ACTION

1. This is a patent infringement action to stop Defendant's infringement of United States Patent Nos. 6,202,023 (the "'023 patent"), 8,935,220 (the "'220 patent"), and 6,356,834 (the "'834 patent") (collectively, the "Patents-in-Suit").

THE PARTIES

2. Plaintiff, Location Services IP, LLC, is a Texas company with their principal place of business at 1400 Preston Road, Suite 475, Plano, Texas 75201.

3. Upon information and belief, Defendant, BPS Direct, L.L.C. d/b/a Bass Pro Shops d/b/a Bass Pro, Inc. ("BPS"), is a corporation organized and existing under the laws of the State of Delaware, with its principal place of business at 2500 East Kearney Street, Springfield, Missouri 65803.

JURISDICTION AND VENUE

4. This action arises under the patent laws of the United States, 35 U.S.C. § 1 et seq., including

35 U.S.C. §§ 271, 281, 283, 284, and 285. This Court has subject matter jurisdiction over this case for patent infringement pursuant to 28 U.S.C. §§ 1331 and 1338(a).

5. The Court has personal jurisdiction over Defendant, including because Defendant has minimum contacts within the State of Texas; Defendant has purposefully availed itself of the privileges of conducting business in the State of Texas; Defendant regularly conducts business within the State of Texas; and Plaintiff's cause of action arises directly from Defendant's business contacts and other activities in the State of Texas, including at least by virtue of Defendant's interactive website and/or app that comprises infringing methods, including those accused methods described herein, which are at least used in and/or accessible in the State of Texas. Further, this Court has general jurisdiction over Defendant, including due to its continuous and systematic contacts with the State of Texas.

6. More specifically, on information and belief, Defendant has an interactive website and/or app comprising infringing methods which are at least used in and/or accessible in the State of Texas. Further, on information and belief, Defendant is subject to the Court's jurisdiction, including because Defendant has committed patent infringement in the State of Texas. Pursuant to 35 U.S.C. § 271, Defendant infringes the Patents-in-Suit by, without authority, its practicing the accused methods described herein in the State of Texas. Further, Defendant solicits customers/users in the State of Texas. On information and belief, Defendant has customers/users who are residents of the State of Texas and who purchase, acquire, and/or use Defendant's infringing products in the State of Texas.

7. Venue is proper in the Eastern District of Texas pursuant to 28 U.S.C. §§ 1391 and 1400(b), including because Defendant has purposefully availed itself of the privileges of conducting business in this District; Defendant regularly conducts business within this District; and Plaintiff's cause of action arises directly from Defendant's business contacts and other activities in this

District, including at least by virtue of Defendant's interactive website and/or app that comprises infringing methods, including those accused methods herein, which are at least used in and/or accessible in this District. Further, Defendant has continuous and systematic contacts with this District.

8. More specifically, on information and belief, Defendant has an interactive website and/or app comprising infringing methods which are at least used in and/or accessible in the State of Texas. Further, on information and belief, Defendant is subject to the Court's jurisdiction, including because Defendant has committed patent infringement in this District. Pursuant to 35 U.S.C. § 271, Defendant infringes the Patents-in-Suit by, without authority, its practicing the accused methods described herein in this District. Further, Defendant solicits customers/users in this District. On information and belief, Defendant has customers/users who are residents of this District and who purchase, acquire, and/or use Defendant's infringing products in this District.

INTRODUCTION

A. Go2

9. The patents-in-suit are the '023 patent, the '834 patent, and the '220 patent. The patents-in-suit originated from Go2, a pioneer in location based services and mobile web technology. Go2 was founded by Lee Hancock, a visionary and inventor who is a named inventor on each of the patents-in-suit.

10. Go2 has had, and Defendant has, commercial success from practicing the claimed inventions of the asserted claims. By 2000 Go2 was the leading mobile search company, the most visible company on the mobile web, having 2 million users a month, and becoming a top 20 internet brand by at least 2005. Go2 had industry leading distribution across virtually all wireless carriers in the United States. Go2 had many marquee customers/strategic relationships such a Coca-Cola, McDonalds, Burger King, Verasign, and Amdocs.

11. Plaintiff is informed and understands that press releases evidencing Go2's commercial success with inventions of the patents-in-suit comprise the following:

2000	
February 28, 2000	**Go2 Systems and ESRI First in U.S. to Deliver Maps Over Internet-Enabled Mobile Phones**-- Companies Demonstrating Technology at CTIA WIRELESS 2000
February 28, 2000	**Sprint TeamsWith Go2 Systems to Deliver Location-Based Directory on the Wireless Web**-- Sprint PCS Customers Nationwide Can Now Access Real-World Locations Via Sprint PCS Internet-Ready Phones
March 16, 2000	**Cendant Internet Group Forms Strategic Alliance with Go2 Systems to Deliver Location-Based Directory on the Wireless Web**-- Companies Will Partner to Co-Market Numerous Cendant Brands and Properties
June 26, 2000	**Go2 Systems Founder Selected as Ernst & Young e-Commerce Entrepreneur**-- Lee Hancock Honored for Entrepreneurial Leadership and Technology Innovation
July 17, 2000	**Go2 Systems Signs Agreement with Verizon W**ireless— go2 Providing Location-Based Service to Verizon Wireless' Mobile Web Customers
October 17, 2000	**go2 Systems Provides Location-Based Services to Wireless Internet Users over Wireless Phones**-- New Deals with BellSouth and Nextel Communications Continue Momentum of go2's Strategy to Build Universal Carrier Relationships
October 17, 2000	**Phone.com and go2 Systems Showcase Location-Based Wireless Services**--go2 Systems Rolls Out "Auto Locate™" Feature Giving Subscribers Ability to Access Category-specific Information
October 18, 2000	**go2 Systems and Motorola to Join Forces in Cross-Platform Offerings**--The strategic alliance is intended to integrate and leverage the two companies' technologies, platforms and distribution channels to offer go2's content and services over Motorola's products, services and platforms in the voice, WAP and wireless car navigation markets.
December 4, 2000	**go2 and Coca-Cola Announce Strategic Alliance –** Coca-Cola Fountain to Offer go2's U.S. Wireless Directory and Information Service to its Food Service Customers
2001	
February 21, 2001	**go2 Systems Reveals Proven Location Commerce Technology**-- go2 Point-of-Sale (POS) Pilot Successfully Completed in Four Month Trial
February 28, 2001	**go2's Wireless Directory now Available on Palm's New Wireless MyPalm Portal**-- Country's Leading Wireless

	Location-Based Services Provider Functions as a Search Engine for the Real World
May 4, 2001	**National Retailers on board with go2 as Internet Moves to Wireless Devices**--17 New go2 Merchants Save Their Customers Time and Money by Making Information Available over Web-Enabled Mobile Phones
October 9, 2001	**go2® Implements AMDOCS A-Frontier**-- Leading content provider implements Amdocs A-Frontier for business process automation, enabling superior customer, sales and content management
2002	
January 7, 2002	**go2 Teams With Microsoft to Provide Location-Based Directory Information for MSN Mobile Services--** Agreement Reflects Growing Demand for Comprehensive Location-Based Information
January 22, 2002	**go2 Receives U.S. patent for Providing Location-Based Information to Portable Phones**-- New patent Adds to the growing portfolio of go2 patents and Intellectual Property Covering Location-Based Services
June 26, 2002	**go2 Directory Integrates with AT&T Wireless Location Technology on mMode**-- go2 is First Nationwide Directory Service on Wireless Phones to Utilize Opt-in Automatic Location
2003	
January 29, 2003	**BOOST Mobile and go2 Partner to Provide Location-Based Directory Services to Youth Wireless Market--** BOOST Mobile and go2® Directory Systems have partnered to provide location-based directory services to the youth wireless market. BOOST Mobile, a leading lifestyle-based wireless telecommunications company serving young and active consumers, has gained access to go2's Mobile Yellow Pages Directory.
October 17, 2003	**YP.net and go2 Sign Distribution Agreement**--YP.Net to add its customer's listings to go2's distribution network, including go2's online and mobile phone applications
2004	
March 31, 2004	**BellSouth® RealPages.com**℠ --goes wirelessRealPages.com will provide advertiser listings for most major wireless carriers in the U.S., which includes Cingular Wireless among others.
2005	
June 29, 2005	**mFoundry Powers go2's New Java Downloadable Mobile Search Application**--mFoundry, provider of the leading mobile application development platform, announced today that the country's leading WAP-based mobile directory and

	movie guide service - go2 - has begun rollout of a premium downloadable mobile directory and movie guide application, go2 mGuide.
2006	
May 10, 2006	**FierceWireless Awards go2 as One of the "Fierce 15" Wireless Companies of 2006**--This distinction honors go2 as one of the top 15 emerging wireless companies for 2006.
August 16, 2006	**Yahoo! and go2 Sign Mobile Search Advertising Distribution Agreement**-- Yahoo! Advertisers to Reach Consumers

12. Plaintiff is informed and understands that some of Go2's business milestones were as follows: Go2 Completes First Round of Institutional Financing (February, 2000); Go2 Obtains Placement on Sprint Mobile (February, 2000); Go2 Obtains Placement on most major U.S. mobile carriers (October, 2000); Go2 Completes Second Round of Financing with Strategic Investors by Amdocs and SAIC (October, 2000); Go2 Signs Strategic Alliance with Coca-Cola (November, 2000); and Go2 Completes Third Round of Financing with strategic investors SAIC and Verisign (September, 2001).

13. Plaintiff is informed and understands that Go2's "firsts" include the following: (1) First to Launch mobile internet yellow pages ("IYP") and local information search service; (2) First to rank IYP search results by proximity to a specific location (online and mobile); (3) First to search local yellow page database through bounded rectangles; (4) First to automatically provide search results from user's last starting point; (5) First to first to automatically use last starting point for next search; (6) First to allow users to name starting points for Internet searches; (7) First to allow users to select starting points by use of name saved by user; (8) First to allow users to select starting points from designated list of saved locations; (9) First to allow registration of proprietary location addresses for physical locations; (10) First to offer one-touch directions from a set location by using known starting points; (11) First to fully integrate the forgoing services between mobile and online websites; (12) First to provide maps over WAP; (13) First to use automatic location

identification (ALI) over mobile phones; and (14) First to integrate ALI with all of the foregoing features.

14. Plaintiff is the current assignee of the patents-in-suit and has standing to bring this lawsuit, including the right to recover damages for past, present, and future infringement of the patents.

B. The ‘023 patent

15. The ‘023 patent was filed as application No. 09/257,462 on February 25, 1999. It is a continuation-in-part of application No. 09/188,153, filed on November 4, 1998, now Pat. No. 6,047,236, which is a continuation of application No. 08/701,586, filed on August 22, 1996, now Pat. No. 5,839,088. Each asserted claim is entitled to priority from the filing dates of each and every of the foregoing applications.

16. The ‘023 patent, entitled “Internet Based Geographic Location Referencing System and Method,” was duly and legally issued by the United States patent and Trademark Office (“USPTO”) on March 13, 2001 after full and fair examination. The ‘023 patent is a continuation-in-part of Application No. 09/188,153 (issued as U.S. patent No. 6,047,236), which is a continuation of Application No. 08/701,586 (issued as the ‘088 patent).

17. The Abstract of the ‘023 patent states the following:

> A system and method for automatically providing services over a computer network, such as the Internet, for users in a mobile environment based on their geographic location. A client computer system is equipped with a local storage device, a wireless transceiver, an input device, an output device and an automatic location identifying (ALI) device. An application program is installed on the client computer system that prompts the user to input information. The application program builds a data packet comprising location information and user information and stores the data packet on the local client storage device. The client computer system connects with a server coupled to a computer network, such as the Internet. Upon connection, the client automatically transmits the electronic data packet to the server. The primary server maintains a database that contains a list of enhanced services. The information in the data packet is used to formulate a database query. The result of the database query is an address of a particular enhanced server that matches the client's request. A specific universal resource locator (URL) that contains the address of the enhanced server is transmitted to the client. The client computer system launches a web browser and connects to the enhanced server. Upon connection relevant data

customized for the client's location is automatically displayed without additional input from the user.

18. As of the priority date of the ‘023 patent, services offered on the Internet did not cater to mobile users. ‘023/1:31-32. It was often cumbersome to interact with Internet services using portable devices due to the interactive nature of on-line sessions that generally required substantial user input. ‘023/1:32-33. This could raise safety concerns, for example, in automotive Internet access devices. ‘023/1:34-35.

19. As of the priority date of the ‘023 patent, the relevant art involved GPS systems and private commercial tracking systems. ‘023/2:16-20 & 38-40. GPS systems allow a GPS receiver to output its location, typically as latitude and longitude numbers, which are cumbersome for users to understand and use. ‘023/2:21-25. “A GPS receiver is sometimes coupled with additional capability that allows the raw latitude/longitude numbers to be converted into a more useful and usable format. ‘023/2:25-28. However, even with these enhancements, a problem with these systems is that they are still difficult to use by persons who are unskilled in the use of location referencing systems. ‘023/2:30-33. Another problem is that these systems are unwieldy because they still retain their global character. Still another problem with these systems is that they are not readily adaptable for use with computer networks such as the Internet. ‘023/2:33-37.

20. As of the priority date of the ‘023 patent, private commercial tracking systems provided the ability to automatically track the location of, for example, a fleet of trucks. ‘023/2:38-41. The problem with these proprietary systems is that they were very complex, expensive and limited to very specific functions. ‘023/2:46-48.

21. One thing that was needed was a referencing system that could be used with a minimum amount of reading, scrolling, and searching, and with a limited number of keystrokes for data entry. ‘023/2:48-51. In addition, what was needed was a user-friendly, truly local addressing system that was easily convertible to a known global system for wide-range concerns. ‘023/2:51-

53. Further, what was needed was a flexible system and method that can be used to automatically provide mobile users with relevant information customized for their current location. ‘023/2:53-56. Additionally, what was needed was a system and method that caters to mobile Internet users by providing customized services based on geographic location. ‘023/2:56-79.

22. As stated in the ‘023 patent, “[t]he present invention relates to a system and method for providing services over a computer network, such as the Internet, for users in mobile environments. Specifically, the system and method of the present invention provides users with information that is specific to the user's geographic location.” ‘023/2:62-67.

23. The technology recited in the claims of the ‘023 patent provides an inventive concept and does not claim an abstract idea. It overcomes deficiencies in the prior art, including greatly enhancing and facilitating the operation of private commercial tracking systems which provided the ability to automatically track the location of, for example, a fleet of trucks, but were very complex, expensive, and limited to very specific functions. Further, the claimed ‘023 invention greatly enhances and facilitates a user’s ability to retrieve the most relevant location-based information quickly, easily, and without user action via a network by providing a referencing system that can be used with a minimum amount of reading, scrolling, and searching, and with a limited number of keystrokes for data entry; a user-friendly, truly local addressing system that is easily convertible to a known global system for wide-range concerns; a flexible system and method that can be used to automatically provide mobile users with relevant information customized for their current location; and a system and method that caters to mobile Internet users by providing customized services based on geographic location.

24. The technology recited in the claims of the ‘023 patent constitutes specific improvements in computer capabilities and the concrete application of novel computing paradigms, and it necessitates the use of discrete computer hardware and software components configured and

programmed in a particular way that enable performance of the specified functions. The technology recited in the claims of the ‘023 patent improves the functioning of computers, it improves computer capabilities, and it improves over existing technological processes, including prior art navigational technology. The claims of the ‘023 patent allow computers, such as those used for navigation, to operate faster and more efficiently than prior art navigation technology. They further allow access to a location database by users connected to the mobile web in order to provide mobile users with relevant information customized for their locations.

25. The claims of the ‘023 patent comprise specific, non-abstract physical components and interactions between those components which collectively meet the claim limitations. For example, the claims require a particular mode of interaction between an application program running on a client computer that contains location-identifying hardware, a server, and a locational database. The claims of the patents-in-suit do not embody an abstract concept, or a concept similar to those found by the courts to be abstract, such as a fundamental economic practice, a method of organizing human activity, an idea itself (standing alone), a longstanding commercial practice, or a mathematical relationship.

26. The ‘023 patent claims cannot be practiced by a human alone and there exists no human analogue to the methods claimed in the ‘023 patent. The claims are specifically directed to, *inter alia*, the providing of specific location information for physical locations of entities from a specialized database for use in navigation apparatuses to locate locations based on the location of the user. These things exist only in the context of computers.

27. The ‘023 patent improves navigation technology in ways that are necessarily rooted in computer technology to overcome problems specifically arising in the realm of computer and navigational networks, including the Internet. The claims recite an invention that was not merely a routine or conventional use of the Internet. At the time of the ‘023 invention there was no

framework for incorporating internet connectivity into navigational positioning systems. Including by providing such a framework, the ‘023 patent improved the operation of navigational devices to provide mobile users with information relevant to their locations. The claimed invention was not practiced by others prior to the ‘023 invention, nor was it a well-known, fundamental economic, or conventional business practice, nor was it a practice to which general-purpose computer components were added after the fact. Further, the technology recited in the claims of the ‘023 patent comprise concretely defined solutions to the problems noted above, including by providing (1) a referencing system that could be used with a minimum amount of reading, scrolling, and searching, and with a limited number of keystrokes for data entry; (2) a user-friendly, truly local addressing system that was easily convertible to a known global system for wide-range concerns; (3) a flexible system and method that can be used to automatically provide mobile users with relevant information customized for their current location; and (4) a system and method that caters to mobile Internet users by providing customized services based on geographic location.

28. The claims of the ‘023 patent comprise specific limitations which were added to distinguish the claimed invention from the prior art and solve specific issues in the prior art. Such limitations comprise a specific improvement to the way computers operate, including that the claims recite novel systems and methods which improve the functionality of computers, including that they provide systems and methods with (1) a user-friendly, truly local addressing system, (2) faster search times via a referencing system that could be used with a minimum amount of reading, scrolling, and searching, and with a limited number of keystrokes for data entry, (3) relevant information for users that is customized for their current location, (4) a database having records for multiple entities, each entity record including a hierarchical address associated with location-related information for an entity, and (5) convenient and ubiquitous access to the locational database.

29. The inventions of the ‘023 patent do not merely permit a known business practice to be performed on the Internet, but instead specify how a specific solution is implemented that addresses a business challenge particular to the Internet, including that the claims address a challenge particular to mobile computing, including by providing an architecture for providing a user with location based information from a location database in real time over a network.

30. The inventions of the ‘023 patent focus on a specific means or method that improves the relevant technology and is not directed to a result or effect that itself is an abstract idea, including that they provide systems and methods that are specialized methods for the providing of specific location information for physical locations of entities from a specialized database for use in navigation apparatuses to locate locations based on the location of the user. As noted above, such specialized methods improve the relevant navigational technology.

31. The claims of the ‘023 patent comprise specific rules for, *inter alia*, determining a user’s location, creating a search query, performing a search on a specialized database, and returning the results of the search based on the user’s location. These rules are embodied in systems and methods comprising software processed by general purpose computers, via processes specifically designed to achieve an improved technological result, such as those described above, in conventional navigational industry practice.

32. The technology of the ‘023 patent does not preempt the field of navigational technology, nor does it preempt all systems and methods for providing location information. Specifically, neither claim 1 nor any other claims of the ‘023 patent is directed to an abstract idea, andneither claim 1 nor any other claims of the ‘023 patent preempt any abstract idea or otherwise preempt anything that would render them unpatentable. There exist other ways to accomplish the intended result of the ‘023 claims without following the stricture of the claims, including that, for example, one is free to practice the prior art of record and the prior art referenced in the specification. The

‘023 claims do not improperly inhibit further discovery by tying up any building blocks of human ingenuity or technological work.

33. Independent claim 1 of the ‘023 patent covers the following: “1. A method for automatically providing informational services based on a geographical location of a client computer system, wherein said informational services are provided by a server attached to a computer network, said method comprising the steps of: executing an application program on said client computer system for collecting user data and location information representative of the geographical location of the client computer system; constructing a data packet comprising said user data and location information; connecting to the server; transmitting said data packet to the server; parsing said data packet to extract said user data and location information; converting said location information into a grid coordinate system comprising a plurality of pre-defined grids, each of said grids corresponding to a geographical area and having: a plurality of cells; a reference location; global coordinates of said reference location; and at least one parameter defining cell size and orientation; formulating a database query from said user data and location information; issuing a database query on a database coupled to the server; and downloading a result from said database query relating to the geographical location of the client computer system to said client.”

34. Claims 1 through 19 of the ‘023 patent cover, among other things, specific applications of specific methods for automatically providing informational services based on a geographical location of a client computer system, wherein said informational services are provided by a server attached to a computer network, including in order to achieve the aims of the invention as stated above, and to overcome the shortcomings in the prior art, including prior art GPS and fleet tracking systems and methods, as noted above. These claims comprise, among other things, specific applications or improvements to technologies in the marketplace, including improvements to the existing GPS and fleet tracking systems and methods. Properly understood, the claimed

technology constitutes the application of certain ideas, and it necessitates the use of discrete computer hardware and software components configured and programmed in a particular way that enable performance of the specified functions.

35. Further, including when claim 1 is viewed as a whole, there are sufficient unconventional, non-routine, novel, meaningful and inventive claim limitations to claim 1 that ensure that the claim in practice amounts to significantly more than an abstract idea or patent ineligible concept. Those unconventional, novel, meaningful and inventive claim limitations comprise the following: automatically providing informational services based on a geographical location of a client computer system, wherein said informational services are provided by a server attached to a computer network, said method comprising the steps of: executing an application program on said client computer system for collecting user data and location information representative of the geographical location of the client computer system; constructing a data packet comprising said user data and location information; connecting to the server; transmitting said data packet to the server; parsing said data packet to extract said user data and location information; converting said location information into a grid coordinate system comprising a plurality of pre-defined grids, each of said grids corresponding to a geographical area and having: a plurality of cells; a reference location; global coordinates of said reference location; and at least one parameter defining cell size and orientation; formulating a database query from said user data and location information; issuing a database query on a database coupled to the server; and downloading a result from said database query relating to the geographical location of the client computer system to said client. Further, claim 1 can only be implemented by a special purpose computer, which is integral the claimed invention, facilitating the process in a way that a person making calculations or computations could not. A special purpose computer is integral to claim 1, including because special programming is necessary to perform the claimed steps. Further, claim 1 necessarily rooted in computer

technology because computer technology is the only way to perform the claimed steps.

36. The invention of claim 1 uses computer technology to overcome the shortcomings of prior art systems and methods, including state of the art GPS, fleet tracking and Yellow Pages systems and methods, which lacked, among other things, the ability to perform the foregoing steps. As such, claim 1 overcomes a technical problem and effects an improvement in another technology or technical field.

37. Claim 1 is not directed to a longstanding commercial practice nor does it merely apply generic or general purposes computers to prior art systems or methods. Including as noted above, prior art systems and methods were incapable of the functionality of the method of claim 1.

38. Claim 2 of the ‘023 patent covers the following: “A method for automatically providing informational services based on a geographical location of a client computer system, wherein said informational services are provided by a server attached to a computer network, said method comprising the steps of: executing an application program on said client computer system for collecting user data and location information representative of the geographical location of the client computer system, said application program including a user interface module, a web browser module, a data packet module and an ALI polling module, said user interface module comprises the steps of: location prompting for accepting parameters for defining a particular location, wherein location prompting includes the step of prompting the user to specify whether said location information is based on a current or projected location; and user preference prompting for accepting one or more user preferences; constructing a data packet comprising said user data and location information; connecting to the server; transmitting said data packet to the server; parsing said data packet to extract said user data and location information; formulating a database query from said user data and location information; and downloading a result from said database query relating to the geographical location of the client computer system to said client.”

39. There is nothing abstract about independent claim 2 of the ‘023 patent (or its dependent claims). Including when viewed as a whole, there are sufficient unconventional, non-routine, novel, meaningful, and inventive claim limitations sufficient to ensure that the claim in practice amounts to significantly more than a patent any abstract idea or patent ineligible concept. Those unconventional, novel, meaningful and inventive claim limitations comprise the following: automatically providing informational services based on a geographical location of a client computer system, wherein said informational services are provided by a server attached to a computer network, said method comprising the steps of: executing an application program on said client computer system for collecting user data and location information representative of the geographical location of the client computer system, said application program including a user interface module, a web browser module, a data packet module and an ALI polling module, said user interface module comprises the steps of: location prompting for accepting parameters for defining a particular location, wherein location prompting includes the step of prompting the user to specify whether said location information is based on a current or projected location; and user preference prompting for accepting one or more user preferences; constructing a data packet comprising said user data and location information; formulating a database query from said user data and location information; and downloading a result from said database query relating to the geographical location of the client computer system to said client.

40. Further, claim 2 can only be implemented by a special purpose computer, which is integral the claimed invention, facilitating the process in a way that a person making calculations or computations could not. A special purpose computer is integral to claim 2, including because special programming, and particular hardware, including an automatic location identifier is necessary to perform the claimed steps. Further, claim 2 is necessarily rooted in computer technology because computer technology, such as using the internet to communicate with a server

and database, is the only way to perform the claimed steps.

41. The invention of claim 2 uses computer technology to overcome the shortcomings of prior art systems and methods, including state of the art GPS, fleet tracking and Yellow Pages systems and methods, which lacked, among other things, the ability to perform the foregoing steps. As such, claim 2 overcomes a technical problem and effects an improvement in any other technology or technical field.

42. Claim 2 is not directed to a longstanding commercial practice nor does it merely apply generic or general purposes computers to prior art systems or methods. Including as noted above, prior art systems and methods were incapable of the functionality of the method of claim 2.

43. Dependent claims 3-8 of the ‘023 patent have some similarities with claim 2, and they are valid for at least the same reasons, but they also contain additional unconventional, novel, meaningful and inventive claim limitations, including when the claims are viewed as a whole, which comprise the projected location being based on (a) a user specified elapsed time, a current speed, a current bearing and current road topology (claim 3) ; information that is relayed to an Intelligent Transportation System (claim 4); a specified elapsed time and a pre-defined route (claim 5). Further, claim 6 depends from claim 5 but also has the novel and meaningful limitation that the pre-defined route is specified using a routing program.

44. Claim 9 of the ‘023 patent has some similarities with claims 1 and 2, and it is valid for at least the same reasons, but it also contains additional unconventional, novel, meaningful and inventive claim limitations, including when the claims are viewed as a whole, which comprise the geographical location being described in terms of a grid referencing system comprising a plurality of pre-defined grids, each of said grids corresponding to a geographical area and having a plurality of cells, a reference location, global coordinates of said reference location, and at least one parameter defining cell size and orientation.

45. Claim 10 of the ‘023 patent has some similarities with claim 9, and it is valid for at least the same reasons, but it also contains additional unconventional, novel, meaningful and inventive claim limitations, including when the claims are viewed as a whole, which comprise the location information being provided by an automatic location identifying device. Dependent claims 11 and 12 contain further novel and meaningful limitations on the automatic location identifying device. Dependent claim 13 further comprises novel and meaningful limitations on the automatic location identifying device. Dependent claim 14 further comprises novel and meaningful limitations wherein the data packet comprises a location, a category of interest, a search radius and user profile information. Dependent claim 15 further comprises the novel and meaningful limitations wherein the result from the database query includes a network address of an enhanced server. Dependent claim 16 further comprises the novel and meaningful limitation wherein the computer network is the Internet. Dependent claim 17 comprises the novel and meaningful limitations further comprising the steps of: reading said result from said database query to extract a URL associated with an enhanced server; launching a web browsing program; and connecting to said enhanced server to receive one or more web pages representing relevant information based on said location information. Dependent claim 18 comprises the novel and meaningful limitations further comprising the steps of reading said result from said database query to extract a network address of an enhanced server and; connecting to said enhanced server to receive relevant information based on said location information. Dependent claim 19 further comprises the novel and meaningful limitation wherein

46. Independent claim 20 of the ‘023 patent covers the following: “A system for automatically providing informational services based on a geographical location of a client computer system, wherein said informational services are ., said system comprising: executing means for collecting user data and location information on said client computer system, said location information

representative of the geographical location of the client computer system; constructing means for generating a data packet on said client computer system comprising said user data and location information; connecting means for connecting to the server; transmitting means for sending said data packet to the server; parsing means for parsing said data packet on said server for extracting said user data and location information; formulating means for formulating a database query from said user data and location information; converting means for converting said location information into a grid coordinate system comprising a plurality of pre-defined grids, each of said grids corresponding to a geographical area and having: a plurality of cells; a reference location; global coordinates of said reference location; and at least one parameter defining cell size and orientation; issuing means for issuing a database query on a database coupled to the server; and downloading means for transmitting a result from said database query relating to the geographical location of the client computer system to said client."

47. Including when claim 20 is viewed as a whole, there are sufficient unconventional, non-routine, novel, meaningful and inventive claim limitations to claim 1 that sufficient to ensure that the claim in practice amounts to significantly more than a patent any abstract idea or patent ineligible concept. Those unconventional, novel, meaningful and inventive claim limitations are each and every of the claim limitations listed above.

48. Further, claim 20 can only be implemented by a special purpose computer, which is integral the claimed invention, facilitating the process in a way that a person making calculations or computations could not. A special purpose computer is integral to claim 20, including because special programming is necessary to perform the claimed steps. Further, claim 20 is necessarily rooted in computer technology because computer technology is the only way to perform the claimed steps.

49. The invention of claim 20 uses computer technology to overcome the shortcomings of prior

art systems and methods, including state of the art GPS, fleet tracking and Yellow Pages systems methods, which lacked, among other things, the ability to perform the foregoing steps. As such, claim 20 overcomes a technical problem and effects an improvement in any other technology or technical field

50. Claim 20 is not directed to a longstanding commercial practice nor does it merely apply generic or general purposes computers to prior art systems or methods. Including as noted above, prior art systems and methods were incapable of the functionality of the method of claim 20.

51. Claim 21 is a computer useable medium claim that in some aspects corresponds to system claim 20, and thus claim 21 is valid at least for the above reasons.

52. Independent claim 22 of the '023 patent covers the following: "In a computational apparatus, a method of addressing a selected location within a geographical area comprising the following steps: selecting a geographical area from a plurality of geographical areas; defining a grid corresponding to the selected geographical area, the grid having a plurality of grid cells, a reference point, global coordinates defined in accordance with a known global referencing system, and a name; subdividing a cell corresponding to the selected location into as many levels of hierarchically-arranged sub-cells as necessary to obtain a desired addressing precision; associating each sub-cell with a sub-cell code; identifying each sub-cell with a hierarchical arrangement of codes; addressing the selected location within the geographical area with an address formed by appending to the name of the grid a hierarchical arrangement of codes corresponding to the selected location; and appending a predefined alpha code to said hierarchical arrangement of codes, said predefined alpha code representing a specific object associated with said address to further identify a specific characteristic of said address."

53. Including when claim 22 is viewed as a whole, there are sufficient unconventional, non-routine, novel, meaningful and inventive claim limitations to claim 1 that sufficient to ensure that

the claim in practice amounts to significantly more than a patent any abstract idea or patent ineligible concept. Those unconventional, novel, meaningful and inventive claim limitations are each and every of the claim limitations listed above.

54. Further, claim 22 can only be implemented by a special purpose computer, which is integral the claimed invention, facilitating the process in a way that a person making calculations or computations could not. A special purpose computer is integral to claim 22, including because special programming is necessary to perform the claimed steps. Further, claim 22 is necessarily rooted in computer technology because computer technology is the only way to perform the claimed steps.

55. The invention of claim 22 uses computer technology to overcome the shortcomings of prior art systems and methods, including state of the art GPS, fleet tracking and Yellow Pages systems methods, which lacked, among other things, the ability to perform the foregoing steps. As such, claim 22 overcomes a technical problem and effects an improvement in any other technology or technical field

56. Claim 22 is not directed to a longstanding commercial practice nor does it merely apply generic or general purposes computers to prior art systems or methods. Including as noted above, prior art systems and methods were incapable of the functionality of the method of claim 20.

C. The ‘220 patent

57. The ‘220 patent was filed as application No. 11/156,875 on June 17, 2005. It is a continuation of application No. 10/701,961, filed on November 5, 2003, now abandoned, which is a continuation of application No. 09/707,213, filed on November. 3, 2000, now abandoned, which is a continuation-in-part of application No. 09/257,462, filed on February 25, 1999, now Pat. No. 6,202,023, which is a continuation-in-part of application No. 09/188,153, filed on November. 4, 1998, now Pat. No. 6,047,236, which is a continuation of application No. 08/701,586, filed on

August 22, 1996, now Pat. No. 5,839,088.

58. The ‘220 patent, entitled “Unified Geographic Database and Method of Creating, Maintaining, and Using the,” was duly and legally issued by the USPTO on January 13, 2015 after full and fair examination. The ‘220 patent is a continuation-in-part of abandoned Application No. 10/701,961, which is a continuation of abandoned Application No. 09/707,213, which is a continuation-in-part of Application No. 09/257,462 (issued as the ‘023 patent), which is a continuation-in-part of Application No. 09/188,153 (issued as U.S. patent No. 6,047,236), which is a continuation of Application No. 08/701,586 (issued as the ‘088 patent)

59. The Abstract to the ‘220 patent states as follows:

> Notwithstanding the power of the Internet as a means of gathering and disseminating information, there is currently no universal "clearinghouse" method or system of acquiring and distributing location-based basic, enhanced and/or real-time information about the millions of real-world businesses and other addresses in the world. Rather, the location-related information is currently stored in literally millions of databases throughout the world, including personal and corporate rolodexes, accounting master files, and especially telephone-directory databases. These disparate sources are continually in flux, but on different schedules, and often materially inaccurate in one way or another. No single source exists to provide or link to correct, up-to-date information regarding all businesses and other entities. Further, it is impossible currently to synthesize the many sources of information on a timely basis, and also to distribute it to the myriad systems where it is needed and used.

60. As of the priority date of the ‘220 patent, the state of the art involved limitations with location-based information wherein the largest single source of location-based information regarding businesses is that of Yellow Page publishers. ‘220/1:56-57. Still, Yellow Pages publishers, whether via physical books or the Internet, did not possess listings of all locations. ‘220/1:57-59. Furthermore, they typically only contain basic information such as name, street address and telephone number. ‘220/2:4-6. These street addresses may or may not be geocoded (through various geocoding engines, with uneven results), so that their actual position in space, and on maps is unreliable. ‘220/2:6-9. Enhanced information is typically obtained by Yellow Page

providers, but this information rarely makes it into any type of universal, location-based database designed to provide immediate access to all users of Internet-enabled devices and services. ‘220/2:9-13. Finally, the information is not updated quickly or, with changes in carriers, even regularly: Yellow-Page books are typically printed annually, and, thus, provide an incredibly inefficient method of address and location handling that ultimately takes little advantage of the power of the Internet. ‘220/2:13-18. Accordingly, large amounts of resources, including time, personnel and money, were being wasted on (1) multiple solicitations of the same information from the same businesses and (2) storage and distribution of that information. ‘220/2:19-23. Users, too, wasted time conducting multiple searches for the same information, seeking confirmation of information from more than one source as an estimate of its accuracy, *i.e.*, to avoid driving some distance to a store which no longer exists or which no longer carries a desired product. ‘220/2:23-27.

61. The ‘220 invention comprises a UGD and method of creating, maintaining, and using the same through one or more Location Name Service. ‘220/3:4-6. In certain claimed embodiments each record of the UGD includes a unique, domain-name like hierarchical geographical referencing address that represents a real-world location for a business or other entity, serves as a discrete identifier for a database record in the UGD for accessing the record, and provides a user-friendly naming convention and interface for all types of electronic devices. ‘220/7-13. In certain claimed embodiments the UGD comprises ULA addresses and one or more PLA addresses (preferably having the same prefix as the ULA, *e.g.*, US.CA.IRV) to discretely identify the record 2800 for accessing the same. ‘220/24-29. PLA addresses are as important to real-world businesses as domain names are to e-businesses, including because PLA addresses identify real-world locations and destinations for commerce just as domain names identify network locations and destinations for e-business. ‘220/19-23. The ULA/PLA, especially the PLA, comprises both a

discrete identifier for a business' record in the UGD, and a user-friendly naming convention and interface for all types of electronic devices-from web phones to car navigation systems. ‘220/23-27.

62. The claimed ‘220 inventions overcome deficiencies in the prior art, including greatly enhancing and facilitating a user’s ability to retrieve the most relevant location-based information quickly and easily via a network via the implementation of a server to facilitate convenient and ubiquitous access to the locational database. ‘220/3:35-37; *See, e.g.*, ‘220 claims 3, 28, and 34. Via such servers, users of connected devices can query the database for detailed location-based information according to both spatial and aspatial attributes which they may (partially) know, *e.g.* business name, street address, registered brands, etc. ‘220/3:37-41; *See, e.g.*, ‘220 claims 3, 28, and 34. Further, the ‘220 invention provides a server for use with a database having records for multiple entities, each entity record including a hierarchical address associated with location-related information for an entity. ‘220/3:47-51; *See, e.g.*, ‘220 claims 3, 28, and 34.

63. Accordingly, large amounts of resources, including time, personnel and money, are were being wasted on (1) multiple solicitations of the same information from the same businesses and (2) storage and distribution of that information. ‘220/2:19-23. Users, too, wasted time conducting multiple searches for the same information, seeking confirmation of information from more than one source as an estimate of its accuracy, *i.e.*, to avoid driving some distance to a store which no longer exists or which no longer carries a desired product. ‘220/2:23-27.

64. One aspect of the invention of the ‘220 patent involves a server to facilitate convenient and ubiquitous access to the locational database. ‘220/3:35-37. Via such servers, users of connected devices can query the database for detailed location-based information according to both spatial and aspatial attributes which they may (partially) know, e.g. business name, street address, registered brands, etc. ‘220/3:37-41.

65. A still further aspect of the invention involves a server for use with a database having records for multiple entities, each entity record including a hierarchical address associated with location-related information for an entity. ‘220 patent/3:47-51.

66. The technology recited in the claims of the ‘220 patent provides an inventive concept and does not claim an abstract idea. The inventive concept inventions overcome deficiencies in the prior art, including greatly enhancing and facilitating a user’s ability to retrieve the most relevant location-based information quickly and easily via a network via the implementation of a server to facilitate convenient and ubiquitous access to the locational database. Via such servers, users of connected devices can query the database for detailed location-based information according to both spatial and aspatial attributes which they may (partially) know, *e.g.* business name, street address, registered brands, etc. Further, the ‘220 invention provides a server for use with a database having records for multiple entities, each entity record including a hierarchical address associated with location-related information for an entity.

67. The technology recited in the claims of the ‘220 patent constitutes specific improvements in computer capabilities and the concrete application of certain ideas, and it necessitates the use of discrete computer hardware and software components configured and programmed in a particular way that enable performance of the specified functions. The technology recited in the claims of the ‘220 patent improves the functioning of computers, it improves computer capabilities, and it improves over existing technological processes, including prior art navigational technology, including by incorporating the capabilities of a server architecture and the mobile internet. The claims of the ‘220 patent allow computers, such as those used for navigation, to operate faster and more efficiently than prior art navigation technology.

68. The claims of the ‘220 patent comprise specific, non-abstract physical components and interactions between those components which collectively meet the claim limitations. The claims

of the patents-in-suit do not embody an abstract concept, or a concept similar to those found by the courts to be abstract, such as a fundamental economic practice, a method of organizing human activity, an idea itself (standing alone), a longstanding commercial practice, or a mathematical relationship.

69. The ‘220 patent claims cannot be practiced by a human alone and there exists no human analogue to the methods claimed in the ‘220 patent. The claims are specifically directed to, *inter alia*, the providing of specific location information for physical locations of entities from a specialized database for use in navigation apparatuses to locate locations based on the location of the user. These things exist only in the context of computers.

70. One inventive component of the ‘220 patent is improving navigation technology in ways that are necessarily rooted in computer technology to overcome problems specifically arising in the realm of computer and navigational networks, including the Internet. The claims recite an invention that was not merely a routine or conventional use of the Internet. The claimed invention was not practiced by others prior to the ‘220 invention, nor was it a well-known, fundamental economic, or conventional business practice, nor was it a practice to which general-purpose computer components were added after the fact. Further, the technology recited in the claims of the ‘220 patent comprise concretely defined solutions to the problems noted above, including by providing (1) a server to facilitate convenient and ubiquitous access to the locational database, where, via such servers, users of connected devices can query the database for detailed location-based information according to both spatial and aspatial attributes which they may (partially) know, e.g. business name, street address, registered brands, etc.; and (2) a server for use with a database having records for multiple entities, each entity record including a hierarchical address associated with location-related information for an entity.

71. The claims of the ‘220 patent comprise specific limitations which were added to distinguish

the claimed invention from the prior art and solve specific issues in the prior art. Such limitations comprise a specific improvement to the way computers operate, including that the claims recite novel systems and methods which improve the functionality of portable computers, including that they provide systems and methods with (1) a user-friendly, truly local addressing system, (2) faster search times via a referencing system that could be used with a minimum amount of reading, scrolling, and searching, and with a limited number of keystrokes for data entry, (3) relevant information for users that is customized for their current location, (4) a database having records for multiple entities, each entity record including a hierarchical address associated with location-related information for an entity, and (5) convenient and ubiquitous access to the locational database.

72. The inventions of the ‘220 patent do not merely permit a known business practice to be performed on the Internet, but instead specify how a specific solution is implemented that addresses a business challenge particular to the Internet, including that the claims address a challenge particular to mobile computing, including by providing an architecture for providing a user with location based information from a location database in real time over a network.

73. The inventions of the ‘220 patent focus on a specific means or method that improves the relevant technology and is not directed to a result or effect that itself is an abstract idea, including that they provide systems and methods that are specialized methods for the providing of specific location information for physical locations of entities from a specialized database for use in navigation apparatuses to locate locations based on the location of the user. As noted above, such specialized methods improve the relevant navigational technology.

74. The claims of the ‘220 patent comprise specific rules for, *inter alia*, determining a user’s location, creating a search query, performing a search on a specialized database, and returning the results of the search based on the user’s location. These rules are embodied in systems and methods

comprising software processed by general purpose computers, via processes specifically designed to achieve an improved technological result, such as those described above, in conventional navigational industry practice.

75. The technology of the ‘220 patent does not preempt the field of navigational technology, nor does it preempt all systems and methods for providing location information. Specifically, neither claim 1 nor any other claims of the ‘220 patent is directed to an abstract idea, andneither claim 1 nor any other claims of the ‘220 patent preempt any abstract idea or otherwise preempt anything that would render them unpatentable. There exist other ways to accomplish the intended result of the ‘220 claims without following the stricture of the claims, including that, for example, one is free to practice the prior art of record and the prior art referenced in the specification or one can search a database without using locational information associated with a navigational apparatus to complete a search, without infringing on the ‘220 patent. The ‘220 claims do not improperly inhibit further discovery by tying up any building blocks of human ingenuity or technological work.

76. Claim 1 of the ‘220 patent covers the following: “A portable navigational apparatus for locating one or more locations of interest within a geographical area, comprising: an input device for entering a proprietary search term uniquely associated with an entity within a district of the geographical area and identifying one or more locations of interest within the geographical area; a processor coupled to the input device for receiving the entered proprietary search term, the processor configured for generating a search query comprising the entered proprietary search term and locational information associated with the navigational apparatus; a communications interface coupled to the processor for communicating with a server via a wireless network, the interface configured for sending the search query to the server, and for receiving a search result from the server, the search result comprising one or more locations for the entity uniquely associated with

the proprietary search term that have a relationship with the locational information; an output device coupled to the processor for outputting the one or more locations comprising the search result; and an automatic location identification ("ALI") device that identifies the current location of the navigational apparatus within the geographic area, the processor coupled to the ALI device for obtaining the current location of the navigational apparatus from the ALI device at the time of sending the search query, the locational information in the search query comprising at least one of the current location and a projected location of the navigational apparatus based at least in part on the current location."

77. Claim 1 of the '220 patent covers, among other things, specific applications of a specific portable navigational apparatus for locating one or more locations of interest within a geographical area, including in order to achieve the aims of the invention as stated above, and including to overcome the shortcomings in the prior art, including prior art GPS, Yellow Pages and fleet tracking systems and methods, as noted above. This claim comprises, among other things, specific applications or improvements to technologies in the marketplace, including improvements to the existing GPS, Yellow Pages and fleet tracking systems and methods. Properly understood, the claimed technology constitutes the application of certain ideas, and it necessitates the use of discrete computer hardware and software components configured and programmed in a particular way that enable performance of the specified functions.

78. Further, including when claim 1 is viewed as a whole, there are sufficient unconventional, non-routine, novel, meaningful and inventive claim limitations to claim 1 that sufficient to ensure that the claim in practice amounts to significantly more than a patent any abstract idea or patent ineligible concept. Those unconventional, novel, meaningful and inventive claim limitations comprise the following: A portable navigational apparatus for locating one or more locations of interest within a geographical area, comprising: an input device for entering a proprietary search

term uniquely associated with an entity within a district of the geographical area and identifying one or more locations of interest within the geographical area; a processor configured for generating a search query comprising the entered proprietary search term and locational information associated with the navigational apparatus; a search result comprising one or more locations for the entity uniquely associated with the proprietary search term that have a relationship with the locational information; and an automatic location identification ("ALI") device that identifies the current location of the navigational apparatus within the geographic area, the processor coupled to the ALI device for obtaining the current location of the navigational apparatus from the ALI device at the time of sending the search query, the locational information in the search query comprising at least one of the current location and a projected location of the navigational apparatus based at least in part on the current location.

79. Further, claim 1 can only be implemented by a special purpose computer, which is integral the claimed invention, facilitating the process in a way that a person making calculations or computations could not. A special purpose computer is integral to claim 1, including because special programming is necessary to perform the claimed steps. Further, claim 1 is necessarily rooted in computer technology because computer technology is the only way to perform the claimed steps.

80. The invention of claim 1 uses computer technology to overcome the shortcomings of prior art systems and methods, including state of the art GPS, fleet tracking and Yellow Pages systems methods, which lacked, among other things, the ability to perform the foregoing steps. As such, claim 1 overcomes a technical problem and effects an improvement in any other technology or technical field

81. Claim 1 is not directed to a longstanding commercial practice nor does it merely apply generic or general purposes computers to prior art systems or methods. Including as noted above,

prior art systems and methods were incapable of the functionality of the method of claim 1.

82. Claim 2 of the ‘220 patent covers the following: “A method for providing informational services using a portable navigational apparatus configured to communicate with a server via a wireless communications network, the method comprising: inputting a proprietary search term to find one or more locations of an entity within a geographical area into the navigational apparatus; sending a search query comprising the proprietary search term via the wireless communications network to the server to allow the server to access a unified geographic database ("UGD") to identify the entity within the geographical area uniquely associated with the proprietary search term, and to use locational information associated with the navigational apparatus to complete a search of the UGD for one or more locations associated with the one or more entities satisfying the search query and limited in geographic scope by the locational information; adding locational information associated with the navigational apparatus to the proprietary search term to limit geographic scope of the search query before sending the search query; receiving a search result from the server via the wireless communications network, the search result comprising one or more locations identified by the proprietary search term that have a relationship with the locational information; and outputting the one or more locations comprising the search result.”

83. Claim 2 of the ‘220 patent covers, among other things, specific applications of a specific method for providing informational services using a portable navigational apparatus configured to communicate with a server via a wireless communications network, including in order to achieve the aims of the invention as stated above, and including to overcome the shortcomings in the prior art, including prior art GPS, Yellow Pages and fleet tracking systems and methods, as noted above. This claim comprises, among other things, specific applications or improvements to technologies in the marketplace, including improvements to the existing GPS, Yellow Pages and fleet tracking systems and methods. Properly understood, the claimed technology constitutes the application of

certain ideas, and it necessitates the use of discrete computer hardware and software components configured and programmed in a particular way that enable performance of the specified functions.

84. Further, including when Claim 2 is viewed as a whole, there are sufficient unconventional, non-routine, novel, meaningful and inventive claim limitations to Claim 2 that sufficient to ensure that the claim in practice amounts to significantly more than a patent any abstract idea or patent ineligible concept. Those unconventional, novel, meaningful and inventive claim limitations comprise the following: a method for providing informational services using a portable navigational apparatus configured to communicate with a server via a wireless communications network, the method comprising: inputting a proprietary search term to find one or more locations of an entity within a geographical area into the navigational apparatus; sending a search query comprising the proprietary search term via the wireless communications network to the server to allow the server to access a unified geographic database ("UGD") to identify the entity within the geographical area uniquely associated with the proprietary search term, and to use locational information associated with the navigational apparatus to complete a search of the UGD for one or more locations associated with the one or more entities satisfying the search query and limited in geographic scope by the locational information; adding locational information associated with the navigational apparatus to the proprietary search term to limit geographic scope of the search query before sending the search query; and receiving a search result comprising one or more locations identified by the proprietary search term that have a relationship with the locational information.

85. Further, Claim 2 can only be implemented by a special purpose computer, which is integral the claimed invention, facilitating the process in a way that a person making calculations or computations could not. A special purpose computer is integral to Claim 2, including because special programming is necessary to perform the claimed steps. Further, Claim 2 is necessarily

rooted in computer technology because computer technology is the only way to perform the claimed steps.

86. The invention of Claim 2 uses computer technology to overcome the shortcomings of prior art systems and methods, including state of the art GPS, fleet tracking and Yellow Pages systems methods, which lacked, among other things, the ability to perform the foregoing steps. As such, Claim 2 overcomes a technical problem and effects an improvement in any other technology or technical field

87. Claim 2 is not directed to a longstanding commercial practice nor does it merely apply generic or general purposes computers to prior art systems or methods. Including as noted above, prior art systems and methods were incapable of the functionality of the method of Claim 2.

88. Claim 3 of the ‘220 patent largely comprises the network/server side method that corresponds to the method of using a portable navigational apparatus of claim 2, and it is valid for at least the same reasons.

89. Claim 4 of the ‘220 patent covers the following: “A system for providing informational services to a plurality of portable navigational apparatus configured to communicate via a wireless communications network, comprising: an interface for communicating with the plurality of navigational apparatus via the communications network, the interface configured for receiving a search query via the communications network from a first portable navigational apparatus, the search query comprising a proprietary location address ("PLA") seeking to locate one or more locations of interest within a geographical area and locational information identifying the current location of the first portable navigational apparatus at the time of sending the search query; and a processor to complete a search of a central repository to identify an entity within a district of the geographical area uniquely associated with the PLA and to identify one or more locations of interest satisfying the search query received via the interface that are associated with the entity and

limited in geographic scope by the locational information; wherein the interface is configured for sending a search result via the communications network to the first portable navigational apparatus, the search result comprising one or more locations associated with the entity identified by the PLA that have a relationship with the locational information."

90. Claim 4 of the '220 patent covers, among other things, specific applications of a specific system for providing informational services to a plurality of portable navigational apparatus configured to communicate via a wireless communications network, including in order to achieve the aims of the invention as stated above, and including to overcome the shortcomings in the prior art, including prior art GPS, Yellow Pages and fleet tracking systems and methods, as noted above. This claim comprises, among other things, specific applications or improvements to technologies in the marketplace, including improvements to the existing GPS, Yellow Pages and fleet tracking systems and methods. Properly understood, the claimed technology constitutes the application of certain ideas, and it necessitates the use of discrete computer hardware and software components configured and programmed in a particular way that enable performance of the specified functions.

91. Further, including when Claim 4 is viewed as a whole, there are sufficient unconventional, non-routine, novel, meaningful and inventive claim limitations to Claim 4 that sufficient to ensure that the claim in practice amounts to significantly more than a patent any abstract idea or patent ineligible concept. Those unconventional, novel, meaningful and inventive claim limitations comprise the following: a system for providing informational services to a plurality of portable navigational apparatus configured to communicate via a wireless communications network, comprising: a search query comprising a proprietary location address ("PLA") seeking to locate one or more locations of interest within a geographical area and locational information identifying the current location of the first portable navigational apparatus at the time of sending the search query; and a processor to complete a search of a central repository to identify an entity within a

district of the geographical area uniquely associated with the PLA and to identify one or more locations of interest satisfying the search query received via the interface that are associated with the entity and limited in geographic scope by the locational information; wherein the interface is configured for sending a search result via the communications network, the search result comprising one or more locations associated with the entity identified by the PLA that have a relationship with the locational information."

92. Further, Claim 4 can only be implemented by a special purpose computer, which is integral the claimed invention, facilitating the process in a way that a person making calculations or computations could not. A special purpose computer is integral to Claim 4, including because special programming is necessary to perform the claimed steps. Further, Claim 4 is necessarily rooted in computer technology because computer technology is the only way to perform the claimed steps.

93. The invention of Claim 4 uses computer technology to overcome the shortcomings of prior art systems and methods, including state of the art GPS, fleet tracking and Yellow Pages systems methods, which lacked, among other things, the ability to perform the foregoing steps. As such, Claim 4 overcomes a technical problem and effects an improvement in any other technology or technical field

94. Claim 4 is not directed to a longstanding commercial practice nor does it merely apply generic or general purposes computers to prior art systems or methods. Including as noted above, prior art systems and methods were incapable of the functionality of the method of Claim 4.

95. Dependent claims 3-8 of the '220 patent have some similarities with claim 2, and they are valid for at least the same reasons, but they also contain additional unconventional, novel, meaningful and inventive claim limitations, including when the claim is viewed as a whole, which comprise limitations on the proprietary search term.

96. Dependent claim 9 of the ‘220 patent has some similarities with claim 1, and it is valid for at least the same reasons, but it also contains additional unconventional, novel, meaningful and inventive claim limitations, including when the claim is viewed as a whole, which comprise limitations comprising wherein the ALI device provides global coordinates identifying the current location of the navigational apparatus, and the processor coupled to the ALI device for receiving the global coordinates identifying the current location of the navigational apparatus when the search query is generated, the global coordinates comprising the locational information in the search query.

97. Dependent claims 10-11 of the ‘220 patent have some similarities with claim 1, and they are valid for at least the same reasons, but they also contain additional unconventional, novel, meaningful and inventive claim limitations, including when the claim is viewed as a whole, which comprise limitations on output device.

98. Dependent claim 12 of the ‘220 patent has some similarities with claim 1, and it is valid for at least the same reasons, but it also contains additional unconventional, novel, meaningful and inventive claim limitations, including when the claim is viewed as a whole, which comprise limitations comprising limitations on the input device.

99. Dependent claims 13-17 of the ‘220 patent have some similarities with claim 1, and they are valid for at least the same reasons, but they also contain additional unconventional, novel, meaningful and inventive claim limitations, including when the claims are viewed as a whole, which comprise limitations on the proprietary search term.

100. Dependent claim 18 of the ‘220 patent has some similarities with claim 2, and it is valid for at least the same reasons, but it also contains additional unconventional, novel, meaningful and inventive claim limitations, including when the claim is viewed as a whole, which comprise limitations comprising at least one of a proprietary location address ("PLA") and a

universal location address ("ULA").

101. Dependent claim 19 of the ‘220 patent has some similarities with claim 2, and it is valid for at least the same reasons, but it also contains additional unconventional, novel, meaningful and inventive claim limitations, including when the claim is viewed as a whole, which comprise limitations wherein the locational information comprises a hierarchical geographic referencing address.

102. Dependent claim 20 of the ‘220 patent has some similarities with claim 2, and it is valid for at least the same reasons, but it also contains additional unconventional, novel, meaningful and inventive claim limitations, including when the claim is viewed as a whole, which comprise limitations wherein the navigational apparatus comprises an automatic location identification ("ALI") device, wherein the navigational apparatus obtains global coordinates identifying the current location of the navigational apparatus from the ALI device at the time of sending the search query, and wherein the global coordinates comprise the locational information in the search query.

103. Dependent claim 21 of the ‘220 patent has some similarities with claim 2, and it is valid for at least the same reasons, but it also contains additional unconventional, novel, meaningful and inventive claim limitations, including when the claim is viewed as a whole, which further comprise entering default regional information into the navigational apparatus, wherein the default regional information comprises the locational information in the search query.

104. Dependent claim 22 of the ‘220 patent has some similarities with claim 2, and it is valid for at least the same reasons, but it also contains additional unconventional, novel, meaningful and inventive claim limitations, including when the claim is viewed as a whole, which further comprise entering default regional information into the navigational apparatus, and sending the default regional information to the server for association with the navigational apparatus such

that the server uses the default regional information as the locational information associated with the navigational apparatus to limit geographic scope of the search query sent by the navigational apparatus.

105. Dependent claim 23 of the ‘220 patent has some similarities with claim 2, and it is valid for at least the same reasons, but it also contains additional unconventional, novel, meaningful and inventive claim limitations, including when the claim is viewed as a whole, which further comprise storing previous locational information from a previous search query using the navigational apparatus, wherein the previous location information comprises the locational information in the search query.

106. Dependent claims 24-27 of the ‘220 patent have some similarities with claim 2, and they are valid for at least the same reasons, but they also contain additional unconventional, novel, meaningful and inventive claim limitations, including when the claims are viewed as a whole, which comprise limitations relating to locational information.

107. Dependent claim 26 of the ‘220 patent has some similarities with claim 2, and it is valid for at least the same reasons, but it also contains additional unconventional, novel, meaningful and inventive claim limitations, including when the claim is viewed as a whole, which comprise wherein the communications network comprises a wireless network and wherein the navigational apparatus is a wireless device.

108. Dependent claim 28, 32 and 33 of the ‘220 patent has some similarities with claim 3, and they are valid for at least the same reasons, but they also contain additional unconventional, novel, meaningful and inventive claim limitations, including when the claims are viewed as a whole, which comprise limitations relating to the proprietary search term.

109. Dependent claims 30-31 of the ‘220 patent have some similarities with claim 3, and they are valid for at least the same reasons, but they also contain additional unconventional, novel,

meaningful and inventive claim limitations, including when the claims are viewed as a whole, which comprise limitations relating to the proprietary address.

110. Dependent claims 32-33 of the ‘220 patent have some similarities with claim 3, and they are valid for at least the same reasons, but they also contain additional unconventional, novel, meaningful and inventive claim limitations, including when the claims are viewed as a whole, which relate to the proprietary search term.

111. Dependent claim 34 of the ‘220 patent has some similarities with claim 3, and it is valid for at least the same reasons, but it also contains additional unconventional, novel, meaningful and inventive claim limitations, including when the claim is viewed as a whole, which comprise global coordinates being received from the navigational apparatus to identify the current location of the navigational apparatus at the time of sending the search query, the global coordinates comprising the locational information used to limit the geographic scope of the search.

112. Dependent claims 35-36 of the ‘220 patent have some similarities with claim 3, and they are valid for at least the same reasons, but they also contain additional unconventional, novel, meaningful and inventive claim limitations, including when the claims are viewed as a whole, which comprise limitations relating to locational information.

113. Dependent claims 37-38 of the ‘220 patent have some similarities with claim 43, and they are valid for at least the same reasons, but they also contain additional unconventional, novel, meaningful and inventive claim limitations, including when the claims are viewed as a whole, which comprise limitations relating to the PLA.

114. Dependent claim 40 of the ‘220 patent has some similarities with claim 4, and it is valid for at least the same reasons, but it also contains additional unconventional, novel, meaningful and inventive claim limitations, including when the claim is viewed as a whole, which further comprise a central repository for storing preferences of users of the plurality of navigational

apparatus, the preferences including unique PLAs associated with an individual, group of individuals, or a corporate entity.

115. Dependent claims 40-41 of the ‘220 patent have some similarities with claim 14, and they are valid for at least the same reasons, but they also contain additional unconventional, novel, meaningful and inventive claim limitations, including when the claims are viewed as a whole, which comprise limitations relating to the search result.

116. Dependent claim 42 of the ‘220 patent has some similarities with claim 19, and it is valid for at least the same reasons, but it also contains additional unconventional, novel, meaningful and inventive claim limitations, including when the claim is viewed as a whole, which comprise limitations relating to the search result.

117. Dependent claim 43 of the ‘220 patent has some similarities with claim 32, and it is valid for at least the same reasons, but it also contains additional unconventional, novel, meaningful and inventive claim limitations, including when the claim is viewed as a whole, which comprise limitations relating to the search result.

118. Dependent claim 44 of the ‘220 patent has some similarities with claim 32, and it is valid for at least the same reasons, but it also contains additional unconventional, novel, meaningful and inventive claim limitations, including when the claim is viewed as a whole, which further comprise: receiving one or more proprietary location addresses ("PLAs") from the entity; confirming that the one or more PLAs are unique within the UGD; and associating the one or more PLAs with the entity within the UGD for subsequent search queries.

119. Dependent claim 45 of the ‘220 patent has some similarities with claim 36, and it is valid for at least the same reasons, but it also contains additional unconventional, novel, meaningful and inventive claim limitations, including when the claim is viewed as a whole, which comprise limitations relating to the search result.

120. Dependent claim 46 of the ‘220 patent has some similarities with claim 42, and it is valid for at least the same reasons, but it also contains additional unconventional, novel, meaningful and inventive claim limitations, including when the claim is viewed as a whole, which comprise limitations relating to proximity.

121. Dependent claim 47 of the ‘220 patent has some similarities with claim 44, and it is valid for at least the same reasons, but it also contains additional unconventional, novel, meaningful and inventive claim limitations, including when the claim is viewed as a whole, which comprise limitations relating to the search result.

122. Dependent claim 48 of the ‘220 patent has some similarities with claim 42, and it is valid for at least the same reasons, but it also contains additional unconventional, novel, meaningful and inventive claim limitations, including when the claim is viewed as a whole, which comprise limitations relate to determining proximity.

D. The ‘834 patent

123. The ‘834 patent was filed as application No. 09/839,979 on April 20, 2001. It is a continuation of application No. 09/540,398, filed on March 31, 2000, now Pat. No. 6,223,122, which is a continuation of application No. 09/188,153, filed on November 4, 1998, now Pat. No. 6,047,236, which is a continuation of application No. 08/701,586, filed on August 22, 1996, now Pat. No. 5,839,088. Each asserted claim is entitled to priority from the filing dates of each and every of the foregoing applications.

124. The Abstract of the ‘834 patent states the following:

> A method and apparatus for defining grid and proprietary addresses of selected locations within a geographical area is described, characterized in that the grid addresses are defined in relation to a grid and can be easily converted to global coordinates defined in relation to a known global referencing system, and the proprietary addresses are unique to the geographical area.

125. As of the priority date of the ‘834 patent, the state of the art at the time of the ‘834

application involved GPS systems, wherein a GPS receiver would output latitude and longitude numbers, which are cumbersome for users to understand and use. ‘834/1:45-54. A GPS receiver is sometimes coupled with additional capability that allows the raw latitude/longitude numbers to be converted into a more useful and usable format. ‘834/1:54-57. However, even with these enhancements, a problem with these systems is that they are still difficult to use by persons who are unskilled in the use of location referencing systems. ‘834/1:59-62. Another problem is that these systems are unwieldy because they still retain their global character. ‘834/1:62-64.

126. The claimed ‘834 invention overcomes shortcomings and/or deficiencies in the prior art, including greatly enhancing and facilitating a user’s ability to retrieve the most relevant location-based information quickly and easily via a network by providing a referencing system that could be used with a minimum amount of reading, scrolling, and searching, and with a limited number of keystrokes for data entry. ‘834/1:64-67. Further, the ‘834 invention provides a user-friendly, truly local addressing system that is easily convertible to a known global system for wide-range concerns. ‘834/1:67-2:3.

127. The “Summary of the Invention” for the ‘834 patent states in part as follows: “The present invention relates to creating and using a location referencing address method associated with an established geographic information system. The location referencing address method has an arbitrary local referencing system that retains a known relationship with a global referencing system.” ‘834/2:4-9.

128. A still further aspect of the invention involves a server for use with a database having records for multiple entities, each entity record including a hierarchical address associated with location-related information for an entity. ‘834/3:47-51.

129. The technology recited in the claims of the ‘834 patent constitutes specific improvements in computer capabilities and the concrete application of certain ideas, and it

necessitates the use of discrete computer hardware and software components configured and programmed in a particular way that enable performance of the specified functions. The technology recited in the claims of the ‘834 patent improves the functioning of computers, it improves computer capabilities, and it improves over existing technological processes, including prior art navigational technology. The claims of the ‘834 patent allow computers, such as those used for navigation, to operate faster and more efficiently than prior art navigation technology.

130. The claims of the ‘834 patent comprise specific, non-abstract physical components and interactions between those components which collectively meet the claim limitations. The claims of the patents-in-suit do not embody an abstract concept, or a concept similar to those found by the courts to be abstract, such as a fundamental economic practice, a method of organizing human activity, an idea itself (standing alone), a longstanding commercial practice, or a mathematical relationship.

131. The ‘834 patent claims cannot be practiced by a human alone and there exists no human analogue to the methods claimed in the ‘834 patent. The claims are specifically directed to, *inter alia*, the providing of specific location information for physical locations of entities from a specialized database for use in navigation apparatuses to find relevant establishments based on the location of the user. These things exist only in the context of computers.

132. One inventive component of the ‘834 patent is improving navigation technology in ways that are necessarily rooted in computer technology to overcome problems specifically arising in the realm of computer and navigational networks, including the Internet. The claims recite an invention that was not merely a routine or conventional use of the Internet. The claimed invention was not practiced by others prior to the ‘834 invention, nor was it a well-known, fundamental economic, or conventional business practice, nor was it a practice to which general-purpose computer components were added after the fact. Further, the technology recited in the claims of

the '834 patent comprise concretely defined solutions to the problems noted above, including by providing (1) a referencing system that could be used with a minimum amount of reading, scrolling, and searching, and with a limited number of keystrokes for data entry; (2) a user-friendly, truly local addressing system that is easily convertible to a known global system for wide-range concerns; and (3) a server for use with a database having records for multiple entities, each entity record including a hierarchical address associated with location-related information for an entity.

133. The claims of the '834 patent comprise specific limitations which were added to distinguish the claimed invention from the prior art and solve specific issues in the prior art. Such limitations comprise a specific improvement to the way computers operate, including that the claims recite novel systems and methods which improve the functionality of computers, including that they provide systems and methods with (1) a user-friendly, truly local addressing system, (2) faster search times via a referencing system that could be used with a minimum amount of reading, scrolling, and searching, and with a limited number of keystrokes for data entry, (3) relevant information for users that is customized for their current location, (4) a database having records for multiple entities, each entity record including a hierarchical address associated with location-related information for an entity, and (5) convenient and ubiquitous access to the locational database.

134. The inventions of the '834 patent do not merely permit a known business practice to be performed on the Internet, but instead specify how a specific solution is implemented that addresses a business challenge particular to the Internet, including that the claims address a challenge particular to mobile computing, including by providing an architecture for providing a user with location based information from a location database in real time over a network.

135. The inventions of the '834 patent focus on a specific means or method that improves the relevant technology and is not directed to a result or effect that itself is an abstract

idea, including that they provide systems and methods that are specialized methods for the providing of specific location information for physical locations of entities from a specialized database for use in navigation apparatuses to locate locations based on the location of the user. As noted above, such specialized methods improve the relevant navigational technology.

136. The claims of the ‘834 patent comprise specific rules for, *inter alia*, determining a user’s location, creating a search query, performing a search on a specialized database, and returning the results of the search based on the user’s location. These rules are embodied in systems and methods comprising software processed by general purpose computers, via processes specifically designed to achieve an improved technological result, such as those described above, in conventional navigational industry practice.

137. The technology of the ‘834 patent does not preempt the field of navigational technology, nor does it preempt all systems and methods for providing location information. Specifically, neither claim 1 nor any other claims of the ‘834 patent is directed to an abstract idea, andneither claim 1 nor any other claims of the ‘834 patent preempt any abstract idea or otherwise preempt anything that would render them unpatentable. There exist other ways to accomplish the intended result of the ‘834 claims without following the stricture of the claims, including that, for example, one is free to practice the prior art of record and the prior art referenced in the specification. The ‘834 claims do not improperly inhibit further discovery by tying up any building blocks of human ingenuity or technological work.

138. Claim 1 of the ‘834 patent covers the following: “A method of creating a proprietary address, comprising: obtaining a proprietary name for a geographic location; obtaining positional information about the geographic location by converting the positional information into a hierarchical address, the hierarchical address includes a specific locational address appended to general position information, the general position information representing at least one of a

plurality of pre-defined grids, each of the grids corresponding to a geographical area and having a plurality of cells and sub-cells corresponding to smaller geographical areas within the grid; verifying that the name is unique for a geographic region; storing the proprietary name and associated positional information if the name is unique for the geographical region."

139. Claims 1 through 34 of the '834 patent cover, among other things, specific applications of specific methods of creating proprietary addresses, including in order to achieve the aims of the invention as stated above, and to overcome the shortcomings in the prior art, including prior art GPS and fleet tracking systems and methods, as noted above. These claims comprise, among other things, specific applications or improvements to technologies in the marketplace, including improvements to the existing GPS and fleet tracking systems and methods. Properly understood, the claimed technology constitutes the application of certain ideas, and it necessitates the use of discrete computer hardware and software components configured and programmed in a particular way that enable performance of the specified functions.

140. Further, including when claim 1 is viewed as a whole, there are sufficient unconventional, non-routine, novel, meaningful and inventive claim limitations to claim 1 that sufficient to ensure that the claim in practice amounts to significantly more than a patent any abstract idea or patent ineligible concept. Those unconventional, novel, meaningful and inventive claim limitations comprise the following: obtaining a proprietary name for a geographic location; obtaining positional information about the geographic location by converting the positional information into a hierarchical address, the hierarchical address including a specific locational address appended to general position information, the general position information representing at least one of a plurality of pre-defined grids, each of the grids corresponding to a geographical area and having a plurality of cells and sub-cells corresponding to smaller geographical areas within the grid; verifying that the name is unique for a geographic region; and storing the proprietary

name and associated positional information if the name is unique for the geographical region.

141. Further, claim 1 can only be implemented by a special purpose computer, which is integral the claimed invention, facilitating the process in a way that a person making calculations or computations could not. A special purpose computer is integral to claim 1, including because special programming is necessary to perform the claimed steps. Further, claim 1 is necessarily rooted in computer technology because computer technology is the only way to perform the claimed steps.

142. The invention of claim 1 uses computer technology to overcome the shortcomings of prior art systems and methods, including state of the art GPS, fleet tracking and Yellow Pages systems methods, which lacked, among other things, the ability to perform the foregoing steps. As such, claim 1 overcomes a technical problem and effects an improvement in any other technology or technical field

143. Claim 1 is not directed to a longstanding commercial practice nor does it merely apply generic or general purposes computers to prior art systems or methods. Including as noted above, prior art systems and methods were incapable of the functionality of the method of claim 1.

144. Dependent claim 2 of the ‘834 patent has some similarities with claim 1, and it is valid for at least the same reasons, but it also contains additional unconventional, novel, meaningful and inventive claim limitations, including when the claim is viewed as a whole, which comprise the specific locational address including a plurality of hierarchical codes representative of a specific cell, sub-cell, and any further levels of cell subdivision.

145. Dependent claim 3 of the ‘834 patent has some similarities with claim 1, and it is valid for at least the same reasons, but it also contains additional unconventional, novel, meaningful and inventive claim limitations, including when the claim is viewed as a whole, which

comprise the certain characteristics for the grids.

146. Dependent claims 4-11 of the '834 patent have some similarities with claim 1, and they are valid for at least the same reasons, but they also contain additional unconventional, novel, meaningful, and inventive claim limitations, including when the claim is viewed as a whole, which comprise the positional information including coordinates from various other mapping systems

147. Independent claim 12 of the '834 patent has some similarities with claim 1 and with other claims as well, and it is valid for at least the same reasons, but it also contains additional unconventional, novel, meaningful and inventive claim limitations, including when the claim is viewed as a whole, comprising the following: automatically verifying that the proprietary name is unique for a geographic region. Claim 13 depends from claim 12, but it also has the tangible limitation of the positional information being obtained automatically by a GPS system.

148. In addition to what is already stated above, the automated and automated GPS functionality of claims 13 and 14 further necessitates the use of discrete computer hardware and software components configured and programmed in a particular way that enable performance of the specified automated functions.

149. Further, in addition to what is stated above with respect to claim 1, claims 12 and 13 can only be implemented by a special purpose computer, which is integral the claimed functionality including the automated functionality, facilitating the process in a way that a person making calculations or computations could not. A special purpose computer is integral to claim 1, including because special programming is necessary to perform the claimed steps including the automated ones. Further, claim 1 is necessarily rooted in computer technology because computer technology is the only way to perform the claimed steps including the automated ones.

150. In addition to what is stated above with respect to claim 1, the inventions of claims 12 and 13 use computer technology, including the above-described automated functionality, to

overcome the shortcomings of prior art systems and methods, including state of the art GPS, fleet tracking and Yellow Pages systems methods, which lacked, among other things, the ability to perform the foregoing steps. As such, in addition to what is stated above with respect to claim 1, claims 12 and 13 overcome a technical problem and effects an improvement in any other technology or technical field

151. In addition to what is stated above with respect to claim 1, the inventions of claims 12 and 13 are not directed to a longstanding commercial practices nor do they merely apply generic or general purposes computers to prior art systems or methods. Including as noted above, prior art systems and methods were incapable of the functionality of the method of claim 1, or for that matter claims 12 and 13.

152. Claims 14 through 16 of the ‘834 patent have some similarities with claim 1 and with other claims as well, but they also contain limitations on the proprietary name (a) being an abbreviated version of a name (claim 14); (b) representing, at least in part, a company's name and a unique identifier for one of many establishments of the company (claim 15); (c) representing, at least in part, an individual person's name (claim 16).

153. Independent claim 17 of the ‘834 patent has some similarities with claim 1 and other claims as well, and it is valid for at least the same reasons, but it also contains additional unconventional, novel, meaningful and inventive claim limitations, including when the claim is viewed as a whole, comprising the proprietary name being specific locational address part of a hierarchical grid address, the hierarchical grid address including a specific locational address appended to general position information, the general position information representing at least one of a plurality of pre-defined grids, each of the grids corresponding to a geographical area and having a plurality of cells and sub-cells corresponding to smaller geographical areas within the grid.

154. Dependent claims 18 through 24 of the ‘834 patent have some similarities with claim 17, but they also contain limitations on what the general position information includes.

155. Independent claim 25 of the ‘834 patent has similarities with multiple claims noted above, and it is valid for at least the same reasons.

156. Dependent claims 26 through 33 of the ‘834 patent have some similarities with claim 17, but they also contain limitations on what the general position information includes.

157. Claims 34 through 65 of the ‘834 patent cover, among other things, specific applications of specific methods of disseminating location information from a tangible central repository via the internet to assist users of tangible locational systems in navigation, including in order to achieve the aims of the invention as stated above, and to overcome the shortcomings in the prior art, including prior art GPS and fleet tracking systems and methods, as noted above. These claims comprise, among other things, specific applications or improvements to technologies in the marketplace, including improvements to the existing GPS and fleet tracking systems and methods. Properly understood, the claimed technology constitutes the application of certain ideas, and it necessitates the use of discrete computer hardware and software components configured and programmed in a particular way that enable performance of the specified functions. Specifically, these claims comprise a client/server architecture to disseminate positional information relating to specific proprietary names from a locational database to a navigational device over the internet.

158. Further, including when claim 34 is viewed as a whole, there are sufficient unconventional, non-routine, novel, meaningful and inventive claim limitations to claim 34 that sufficient to ensure that the claim in practice amounts to significantly more than a patent any abstract idea or patent ineligible concept. Those unconventional, novel, meaningful and inventive claim limitations comprise the following: disseminating location information from a central repository via the internet to assist users of locational systems in navigation; providing a central

repository with stored information for at least one geographic region, the stored information including positional information for geographic locations associated with respective proprietary names, wherein said positional information includes a hierarchical address having a specific locational address appended to general position information, the general position information representing at least one of a plurality of pre-defined grids, each of the grids corresponding to a geographical area and having a plurality of cells and sub-cells corresponding to smaller geographical areas within the grid; disseminating location information for a proprietary name from the central repository to a user via the internet to use in association with said locational system to assist in navigation.

159. Further, claim 34 can only be implemented by a special purpose computer, which is integral the claimed invention, facilitating the process in a way that a person making calculations or computations could not. A special purpose computer is integral to claim 34, including because special programming is necessary to perform the claimed steps. Further, claim 34 is necessarily rooted in computer technology because computer technology is the only way to perform the claimed steps.

160. The invention of claim 34 uses computer technology to overcome the shortcomings of prior art systems and methods, including state of the art GPS, fleet tracking and Yellow Pages systems methods, which lacked, among other things, the ability to perform the foregoing steps. As such, claim 34 overcomes a technical problem and effects an improvement in any other technology or technical field

161. Claim 34 is not directed to a longstanding commercial practice nor does it merely apply generic or general purposes computers to prior art systems or methods. Including as noted above, prior art systems and methods were incapable of the functionality of the method of claim 34.

162. Dependent claim 35 of the ‘834 patent has some similarities with claim 34, and it is valid for at least the same reasons, but it also contains additional unconventional, novel, meaningful and inventive claim limitations, including when the claim is viewed as a whole, which comprise the specific locational address including a plurality of hierarchical codes representative of a specific cell, sub-cell, and any further levels of cell subdivision.

163. Dependent claim 36 of the ‘834 patent has some similarities with claim 34, and it is valid for at least the same reasons, but it also contains additional unconventional, novel, meaningful and inventive claim limitations, including when the claim is viewed as a whole, which comprise the certain characteristics for the grids.

164. Claims 37 - 44 of the ‘834 patent has some similarities with claim 34, and they are valid for at least the same reasons, but it also contains additional unconventional, novel, meaningful and inventive claim limitations, including when the claim is viewed as a whole, which comprise the positional information including (a) geodetic latitude and longitude coordinates (claim 37); (b) coordinates from a Universal Transverse Mercator (UTM) mapping system (claim 38); (c) coordinates from a Military Grid Reference System (MGRS) (claim 39); coordinates from a World Geographic Reference System (GEOREF) (claim 40); coordinates from a Maidenhead mapping system (claim 41); coordinates from a Trimple Grid mapping system (claim 42); coordinates from a Trimble Atlas mapping system (claim 43); and coordinates from a Thomas Brothers Detail mapping system (claim 44)

165. Claim 45 of the ‘834 patent has some similarities with claim 34, and it is valid for at least the same reasons, but it also contains additional unconventional, novel, meaningful and inventive claim limitations, including when the claim is viewed as a whole, which comprise wherein the proprietary name is the specific locational address part of a hierarchical grid address, the hierarchical grid address includes a specific locational address appended to general position

information, the general position information representing at least one of a plurality of pre-defined grids, each of the grids corresponding to a geographical area and having a plurality of cells and sub-cells corresponding to smaller geographical areas within the grid.

166. Dependent claims 45-53 of the ‘834 patent have some similarities with claim 34, and they are valid for at least the same reasons, but they also contain additional unconventional, novel, meaningful and inventive claim limitations, including when the claims are viewed as a whole, which comprise what the general position information includes.

167. Dependent claims 54-56 of the ‘834 patent have some similarities with claim 34, and they are valid for at least the same reasons, but they also contain additional unconventional, novel, meaningful and inventive claim limitations, including when the claims are viewed as a whole, which comprise the proprietary name (a) being an abbreviated version of a name (claim 54); representing, at least in part, a company's name and a unique identifier for one of many establishments of the company (claim 55); representing, at least in part, an individual person's name (claim 56).

168. Claim 57 of the ‘834 patent has some similarities with claim 34, and it is valid for at least the same reasons, but it also contains additional unconventional, novel, meaningful and inventive claim limitations, including when the claim is viewed as a whole, which comprise providing a central repository with stored information for at least one geographic region, the stored information including positional information for geographic locations associated with respective proprietary names, wherein said positional information includes a hierarchical address having a specific locational address appended to general position information.

169. Claim 58 of the ‘834 patent has some similarities with claim 57, and it is valid for at least the same reasons, but it also contains additional unconventional, novel, meaningful and inventive claim limitations, including when the claim is viewed as a whole, which comprise the

general position information including top, second, and third level hierarchical codes for identifying countries, states/provinces, and cities.

170. Claims 59-64 of the ‘834 patent have some similarities with claim 57, and they are valid for at least the same reasons, but they also contain additional unconventional, novel, meaningful and inventive claim limitations, including when the claims are viewed as a whole, which comprise further limitations on what the general position information includes.

171. Claim 65 of the ‘834 patent has some similarities with claim 57, and it is valid for at least the same reasons, but it also contains additional limitations relating to the geographic location.

COUNT I – INFRINGEMENT OF U.S. PATENT NO. 6,202,023

172. Plaintiff refers to and incorporates herein the allegations of the above paragraphs.

173. The ‘023 Patent, entitled “Internet Based Geographic Location Referencing System and Method,” was duly and legally issued by the United States Patent and Trademark Office (“USPTO”) on March 13, 2001 after full and fair examination. The ‘023 Patent is a continuation-in-part of Application No. 09/188,153 (issued as U.S. Patent No. 6,047,236), which is a continuation of Application No. 08/701,586 (issued as the ‘088 Patent).

174. The claims of the ‘023 Patent cover, *inter alia*, a method for automatically providing informational services based on a geographical location of a client computer system, wherein said informational services are provided by a server attached to a computer network, said method comprising the steps of: executing an application program on said client computer system for collecting user data and location information representative of the geographical location of the client computer system, said application program including a user interface module, a web browser module, a data packet module and an ALI polling module, said user interface module comprises the steps of: location prompting for accepting parameters for defining a particular location,

wherein location prompting includes the step of prompting the user to specify whether said location information is based on a current or projected location; and user preference prompting for accepting one or more user preferences; constructing a data packet comprising said user data and location information; connecting to the server; transmitting said data packet to the server; parsing said data packet to extract said user data and location information; formulating a database query from said user data and location information; issuing a database query on a database coupled to the server; and downloading a result from said database query relating to the geographical location of the client computer system to said client.

175. Defendant has infringed and is now infringing, including literally, jointly, and/or equivalently, the '023 Patent, including claim 2, in this judicial district, the State of Texas, and elsewhere in the United States, in violation of 35 U.S.C. § 271 through actions comprising the practicing, making, using, offering for sale, selling, hosting, and/or importing, without authority from Plaintiff, methods, including associated with apps, for executing an application program on said client computer system for collecting user data and location information representative of the geographical location of the client computer system, said application program including a user interface module, a web browser module, a data packet module and an ALI polling module, said user interface module comprises the steps of: location prompting for accepting parameters for defining a particular location, wherein location prompting includes the step of prompting the user to specify whether said location information is based on a current or projected location; and user preference prompting for accepting one or more user preferences; constructing a data packet comprising said user data and location information; connecting to the server; transmitting said data packet to the server; parsing said data packet to extract said user data and location information; formulating a database query from said user data and location information; issuing a database query on a database coupled to the server; and downloading a result from said database query

relating to the geographical location of the client computer system to said client.

176. Defendant infringes the ‘023 Patent, including claim 2, by and through at least its practicing and/or hosting methods comprising at least the interactive website located at https://www.basspro.com, https://www.basspro-shops.com, https://www.bassproshops1source.com, https://www.basspro1source.com, https://1source.basspro.com, https://m.basspro.com, https://blogs.basspro.com, and https://www.outdoorsite.com, including http://www.basspro.com/webapp/wcs/stores/servlet/CFPageC?appID=94&storeId=10151&catalogId=10051&langId=-1&tab=3&tab=3 and http://m.basspro.com/webapp/wcs/stores/servlet/CFPageC?appID=94&storeId=10151&catalogId=10051&langId=-1&tab=3&tab=, and the Bass Pro Shops Mobile Application (including at least the Bass Pro Shops Mobile iOS Application and Bass Pro Shops Mobile Android Application) and the Boat Buddy Mobile Application (including at least the Boat Buddy Mobile iOS Application).

177. On information and belief, Defendant has had at least constructive notice of the ‘023 patent pursuant to the Patent Act. Plaintiff reserves the right to take discovery regarding Defendant’s first actual notice of the ‘023 patent.

178. Each of Defendant’s aforesaid activities have been without authority and/or license from Plaintiff. Such activities constitute Defendant’s infringement of the ‘023 patent by Defendant’s practicing and/or hosting, at least the methods described herein, that infringe the patented invention, and Defendant will continue to do so unless enjoined by the Court.

COUNT II – INFRINGEMENT OF U.S. PATENT NO. 8.935,220

179. Plaintiff refers to and incorporates herein the allegations of the above paragraphs.

180. The ‘220 Patent, entitled “Unified Geographic Database and Method of Creating, Maintaining, and Using the,” was duly and legally issued by the USPTO on January 13, 2015 after

full and fair examination. The ‘220 Patent is a continuation-in-part of abandoned Application No. 10/701,961, which is a continuation of abandoned Application No. 09/707,213, which is a continuation-in-part of Application No. 09/257,462 (issued as the ‘023 Patent), which is a continuation-in-part of Application No. 09/188,153 (issued as U.S. Patent No. 6,047,236), which is a continuation of Application No. 08/701,586 (issued as the ‘088 Patent).

181. The claims of the ‘220 Patent cover, *inter alia*, a method for providing informational services via a communications network, the method comprising: receiving a search query via the communications network from a portable navigational apparatus, the search query comprising a proprietary search term identifying one or more locations of interest within a geographical area and locational information identifying a current location of the navigational apparatus at the time of sending the search query; accessing a unified geographic database ("UGD") to identify an entity within a district of the geographical area uniquely associated with the proprietary search term; using the locational information included in the search query from the navigational apparatus to complete a search of the UGD for one or more locations associated with the entity satisfying the search query and limited in geographic scope by the locational information; and sending a search result via the communications network to the navigational apparatus, the search result comprising one or more locations associated with the one or more entities identified by the proprietary search term that have a relationship with the locational information.

182. Defendant has infringed and is now infringing, including literally, jointly, and/or equivalently, the ‘220 Patent, including claims 3, 28, and 34, in this judicial district, the State of Texas, and elsewhere in the United States, in violation of 35 U.S.C. § 271 through actions comprising the practicing, making, using, offering for sale, selling, hosting, and/or importing, without authority from Plaintiff, methods, including associated with websites and/or apps, for

providing informational services via a communications network, the method comprising: receiving a search query via the communications network from a portable navigational apparatus, the search query comprising a proprietary search term identifying one or more locations of interest within a geographical area and locational information identifying a current location of the navigational apparatus at the time of sending the search query; accessing a unified geographic database ("UGD") to identify an entity within a district of the geographical area uniquely associated with the proprietary search term; using the locational information included in the search query from the navigational apparatus to complete a search of the UGD for one or more locations associated with the entity satisfying the search query and limited in geographic scope by the locational information; and sending a search result via the communications network to the navigational apparatus, the search result comprising one or more locations associated with the one or more entities identified by the proprietary search term that have a relationship with the locational information.

183. Defendant infringes the '220 Patent, including claim 2, 28, and 34, by and through at least its practicing and/or hosting methods comprising at least the interactive website located at https://www.basspro.com, https://www.basspro-shops.com, https://www.bassproshops1source.com, https://www.basspro1source.com, https://1source.basspro.com, https://m.basspro.com, https://blogs.basspro.com, and https://www.outdoorsite.com, including http://www.basspro.com/webapp/wcs/stores/servlet/CFPageC?appID=94&storeId=10151&catalogId=10051&langId=-1&tab=3&tab=3 and http://m.basspro.com/webapp/wcs/stores/servlet/CFPageC?appID=94&storeId=10151&catalogId=10051&langId=-1&tab=3&tab=, and the Bass Pro Shops Mobile Application (including at least the Bass Pro Shops Mobile iOS Application and Bass Pro Shops Mobile Android Application) and

the Boat Buddy Mobile Application (including at least the Boat Buddy Mobile iOS Application).

184. On information and belief, Defendant has had at least constructive notice of the ‘220 patent pursuant to the Patent Act. Plaintiff reserves the right to take discovery regarding Defendant’s first actual notice of the ‘220 patent.

185. Each of Defendant’s aforesaid activities have been without authority and/or license from Plaintiff. Such activities constitute Defendant’s infringement of the ‘220 patent by Defendant’s practicing and/or hosting, at least the methods described herein, that infringe the patented invention, and Defendant will continue to do so unless enjoined by the Court.

COUNT III – INFRINGEMENT OF U.S. PATENT NO. 6,356,834

186. Plaintiff refers to and incorporates herein the allegations of the above paragraphs.

187. The ‘834 Patent, entitled “Geographic Location Referencing System and Method,” was duly and legally issued by the USPTO on March 12, 2002 after full and fair examination. The ‘834 Patent is a continuation-in-part of Application No. 09/540,398 (issued as the ‘122 Patent), which is a continuation-in-part of Application No. 09/188,153 (issued as U.S. Patent No. 6,047,236), which is a continuation of Application No. 08/701,586 (issued as the ‘088 Patent).

188. The claims of the ‘834 Patent cover, *inter alia*, a method of disseminating location information from a central repository via the internet to assist users of locational systems in navigation, comprising: providing a central repository with stored information for at least one geographic region, the stored information including positional information for geographic locations associated with respective proprietary names, wherein the positional information includes geodetic latitude and longitude coordinates; and disseminating location information for a proprietary name from the central repository to a user via the internet to use in association with said locational system to assist in navigation.

189. Defendant has infringed and are now infringing, including literally, jointly, and/or

equivalently, the ‘834 Patent, including claims 37, 55, 56, and 57, in this judicial district, the State of Texas, and elsewhere in the United States, in violation of 35 U.S.C. § 271 through actions comprising the practicing, making, using, offering for sale, selling, hosting, and/or importing, without authority from Plaintiff, methods of disseminating location information from a central repository via the internet to assist users of locational systems in navigation, comprising: providing a central repository with stored information for at least one geographic region, the stored information including positional information for geographic locations associated with respective proprietary names, wherein the positional information includes geodetic latitude and longitude coordinates; and disseminating location information for a proprietary name from the central repository to a user via the internet to use in association with said locational system to assist in navigation.

190. Defendant infringes the ‘834 Patent, including claims 37, 55, 56, and 57, by and through at least its practicing and/or hosting methods comprising at least the interactive website located at https://www.basspro.com, https://www.basspro-shops.com, https://www.bassproshops1source.com, https://www.basspro1source.com, https://1source.basspro.com, https://m.basspro.com, https://blogs.basspro.com, and https://www.outdoorsite.com, including http://www.basspro.com/webapp/wcs/stores/servlet/CFPageC?appID=94&storeId=10151&catalogId=10051&langId=-1&tab=3&tab=3 and http://m.basspro.com/webapp/wcs/stores/servlet/CFPageC?appID=94&storeId=10151&catalogId=10051&langId=-1&tab=3&tab=, and the Bass Pro Shops Mobile Application (including at least the Bass Pro Shops Mobile iOS Application and Bass Pro Shops Mobile Android Application) and the Boat Buddy Mobile Application (including at least the Boat Buddy Mobile iOS Application).

191. On information and belief, Defendant has had at least constructive notice of the

‘834 patent pursuant to the Patent Act. Plaintiff reserves the right to take discovery regarding Defendant’s first actual notice of the ‘834 patent.

192. Each of Defendant’s aforesaid activities have been without authority and/or license from Plaintiff. Such activities constitute Defendant’s infringement of the ‘834 patent by Defendant’s practicing and/or hosting, at least the methods described herein, that infringe the patented invention, and Defendant will continue to do so unless enjoined by the Court.

DAMAGES

193. By way of their infringing activities, Defendant has caused and continue to cause Plaintiff to suffer damages, and Plaintiff is entitled to recover from Defendant the damages sustained by Plaintiff as a result of Defendant’s wrongful acts in an amount subject to proof at trial, which, by law, cannot be less than a reasonable royalty, together with interest and costs as fixed by this Court under 35 U.S.C. § 284.

194. Defendant’s infringement of Plaintiff’s rights under the Patents-in-Suit will continue to damage Plaintiff, causing irreparable harm for which there is no adequate remedy at law, unless enjoined by this Court.

195. To the extent that facts learned during the pendency of this case show that Defendant’s infringement is, or has been, willful, Plaintiff contends this is an exceptional case entitling Plaintiff to recover its attorneys fees and costs pursuant to 35 U.S.C. § 285.

JURY DEMAND

196. Plaintiff hereby requests a trial by jury pursuant to Rule 38 of the Federal Rules of Civil Procedure on all issues so triable.

PRAYER FOR RELIEF

197. Plaintiff respectfully requests that the Court find in their favor and against Defendant, and that the Court grant Plaintiff the following relief:

A. An adjudication that one or more claims of the Patent-in-Suit has been directly infringed, either literally and/or under the doctrine of equivalents, by Defendant;

B. An award to Plaintiff of damages adequate to compensate Plaintiff for Defendant's past infringement, together with pre-judgment and post-judgment interest, and any continuing or future infringement through the date such judgment is entered, including interest, costs, expenses, and an accounting of all infringing acts including, but not limited to, those acts not presented at trial;

C. A grant of preliminary and permanent injunction pursuant to 35 U.S.C. § 283, enjoining Defendant and all persons, including its officers, directors, agents, servants, affiliates, employees, divisions, branches, subsidiaries, parents, and all others acting in active concert or participation therewith, from making, using, offering to sell, or selling in the United States or importing into the United States any methods, systems, or computer readable media that infringe any claim of the Patents-in-Suit, or contributing to or inducing the same by others from further acts of infringement with respect to the claims of the Patent-in-Suit;

D. That this Court declare that Defendant's infringement has been, and continues to be, willful, including that Defendant acted to infringe the Patents-in-Suit despite an objectively high likelihood that its actions constituted infringement of a valid patent and, accordingly, award enhanced damages, including treble damages, pursuant to 35 U.S.C. § 284;

E. That this Court declare this to be an exceptional case and award Plaintiff reasonable attorneys' fees and costs in accordance with 35 U.S.C. § 285; and

F. A judgment and order requiring Defendant to pay Plaintiff its damages, costs, expenses, fees, and prejudgment and post-judgment interest for Defendant's infringement of the Patent-in-Suit as provided under 35 U.S.C. §§ 284 and/or 285; and

G. Any and all further relief for which Plaintiff may show itself justly entitled that this Court deems just and proper.

March 22, 2017

Respectfully submitted,

/s/ *John J. Edmonds*
John J. Edmonds – Lead Counsel
jedmonds@ip-lit.com
Texas Bar No. 789758
Stephen F. Schlather
sschlather@ip-lit.com
Texas Bar No. 24007993
Shea N. Palavan
spalavan@ip-lit.com
Texas Bar No. 24083616
Brandon G. Moore
bmoore@ip-lit.com
Texas Bar No. 24082372
Eric R. Carr
ecarr@ip-lit.com
Texas Bar No. 24091261
COLLINS, EDMONDS,
SCHLATHER & TOWER, PLLC
1616 South Voss Road, Suite 125
Houston, Texas 77057
Telephone: (281) 501-3425
Facsimile: (832) 415-2535

Attorneys for Plaintiff,
Location Services IP, LLC